Appendix G Agency Coordination Letters

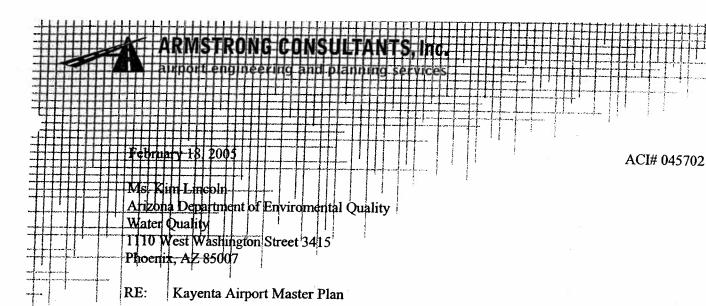


Kayenta Airport Airport Master Plan

AGENCY COORDINATION LETTER INVENTORY

For the Kayenta Airport Master Plan

- 1. Arizona Department of Environmental Quality (water quality control)
- 2. Arizona Department of Environmental Quality (air quality control)
- 3. Navajo Tribal Utility Authority
- 4. Museum of Northern Arizona
- 5. Navajo Department of Fish and Wildlife



Dear Ms. Lincoln:

Armstrong Consultants has been retained to prepare an Airport Master Plan for the Kayenta Airport in Kayenta, Arizona. To assist us in preparing this Airport Master Plan, and to comply with the requirements of NEPA and the Federal Aviation Administration, we request your comments concerning the possibility of the proposed development actions impacting water quality.

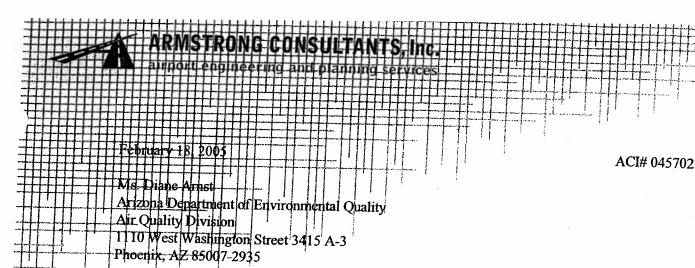
Enclosed for your reference is a location map, a vicinity map, drawing, and aerial photo of the proposed improvements to the Kayenta Airport. Please forward any comment at your earliest convenience and please contact me at (970) 242-0101 if you have any questions regarding this project. Thank you for your assistance.

Sincerely,

ARMSTRONG CONSULTANTS, INC.

Justin Pots

Justin Pietz Airport Planner



RE: K

Kayenta Airport Master Plan

Dear Ms. Arnst:

Armstrong Consultants has been retained to prepare an Airport Master Plan for the Kayenta Airport in Kayenta, AZ. To assist us in preparing this Master Plan, and to comply with the requirements of NEPA and the Federal Aviation Administration, we request your comments concerning the potential impacts to air quality and any permitting requirements.

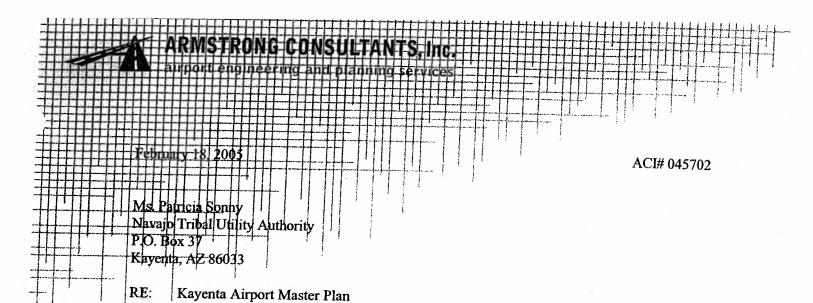
Enclosed for your reference is a location map, a vicinity map, drawing, and aerial photo of the proposed improvements to the Kayenta Airport. Please forward any comment at your earliest convenience and please contact me at (970) 242-0101 if you have any questions regarding this project. Thank you for your assistance.

Sincerely,

ARMSTRONG CONSULTANTS, INC.

Justin Post

Justin Pietz Airport Planner



Dear Ms. Patricia:

Armstrong Consultants has been retained to prepare an Airport Master Plan for the Kayenta Airport in Kayenta, Arizona. The plan will include a runway shift that will cross over the underground power line to the northeast. What are your requirements for the crossing? The current electrical capacity at the airport will also need to be addressed and what the potential is for increasing the capacity if necessary and the estimated costs.

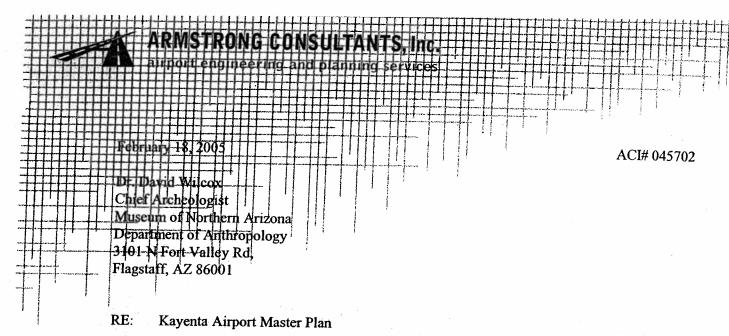
Enclosed for your reference is a drawing of the proposed improvements to the Kayenta Airport. Please forward any comment at your earliest convenience and please contact me at (970) 242-0101 if you have any questions regarding this project. Thank you for your assistance.

Sincerely,

ARMSTRONG CONSULTANTS, INC.

Nutri Pit

Justin Pietz Airport Planner



Dear Dr. Wilcox:

In 1986 your agency was solicited for an Archeological Survey for an Airport Master Plan, prepared by Carter Associates, for the proposed airport improvements at the Kayenta Airport in Kayenta Arizona. A copy of your 1986 comments is attached. The airport has been constructed, however new plans for improvements have been made; we would like to confirm that your previous finding of "No Effect" is still valid. Also enclosed is a drawing of the proposed projects to take place for your reference.

We respectfully request that you review your previous comments and forward your confirmation or any new comments at your earliest convenience within 30 days. If you have any questions please feel free to contact me at (970) 242-0101.

Sincerely,

ARMSTRONG CONSULTANTS, INC.

Justin Pot

Justin Pietz Airport Planner

MUSEUM OF NORTHERN ARIZONA



January 2, 1987

Nicholas J. Pela Project Manager Airport Division Carter Associates, Inc. 210 N. Park Flagstaff, AZ 86001

-Dear Mr. Pela:

Enclosed please find one (1) amended title page for our report entitled: Archaeological Investigations for the Kayenta Airport Expansion, Navajo Indian Reservation, Navajo County, Arizona, by Martha M. Callahan. The title page now includes the BIA project number, fulfilling clarification "a." of the BIA letter dated December 8, 1986 of conditional archaeological clearance for the subject project.

Clarification "b." requires more information on the "present airport structures as a cultural resource." The existing runway is adequately described in the report. Airport structures consist of a single hanger, dirt tie-down area, a windsock and several fuel pumps. None of these appear older than 30 years.

Clarification "c." requires additional information on the horse corral. As described in the report, the corral is immediately adjacent to the northwest corner of the existing runway and is presently in use. The structure does not appear to be more than 20 years old.

The archaeologist who performed this archaeological inventory would like to make one additional comment concerning the Conditional Archaeological Clearance. This document requires archaeological monitoring within 50 ft of I.O. No. 7 "because of the possibility of buried resources." Although our report does mention the possibility of buried resources in the area, there are two I.O.'s which the archaeologist is certain represent only surface manifestations. These include I.O. No. 6, the child's fort, and I.O. No. 7, the Tsegi Orange "pot drop." Although the BIA letter identifies this latter as a "site", and lists "15 to 25 sherds", it is identified in the report as an isolated find of 15 to 20 sherds. Since all of these sherds were derived from

Page 2 Mr. M. Pela January 2, 1986

the same vessel there is virtually no possibility of subsurface remains resulting from this surface manifestation. Therefore, in our opinion archaeological monitoring at this locality is not necessary.

If you have any questions concerning these clarifications/comments please feel free to contact ${\rm me.}$

Sincerely,

Donald E. Weaver, go.

Donald E. Weaver, Jr.
Chief Archaeologist
Department of Anthropology

Enclosures

cc: Cultural Resource Manager Bia Navajo Area Office (305) P.O. Box M. Window Rock, AZ 86515

MC/mw

MUSEUM OF NORTHERN ARIZONA DEPARTMENT OF ANTHROPOLOGY

ARCHAEOLOGICAL INVESTIGATIONS

CARTER ASSOCIATES, INC.

FLAGSTAFF, ARIZONA

KAYENTA AIRPORT SURVEY

NAVAJO INDIAN RESERVATION

NAVAJO COUNTY, ARIZONA

AMENDED

Final Report

for

Archaeological Investigations for the Kayenta Airport Expansion Navajo Indian Reservation Navajo County, Arizona

A-86-77

Carter Associates Project No. 138-84114 BIA NOA MNA-86-395 Prepared by:

Martha M. Callahan

Submitted by:

Donald E. Weaver, Jr. Chief Archaeologist

November 14, 1986

ABSTRACT: From November 10 to 12, 1986, an archaeological survey was conducted by the Anthropology Department, Museum of Northern Arizona, for Carter Associates, Engineers and Planners, of a 105 hectare tract of land near Kayenta, Arizona. This parcel includes the existing dirt airport runway and an adjacent area proposed for airport expansion. No archaeological sites and nine isolated finds were recorded. Because no direct or indirect impact to significant cultural resources will result from the proposed construction activities, clearance for the project is recommended.

INTRODUCTION

At the request of Carter Associates, Engineers and Planners, Flagstaff, Arizona, in a letter dated October 13, 1986, an archaeological survey was performed by the Department of Anthropology, Museum of Northern Arizona (MNA), of a 105 hectare (259 acre) area proposed for the Kayenta airport expansion. Field work was performed on November 10th, 11th and 12th by the author, Dolly Spalding, and Gretchen Guice, all MNA personnel. A detailed map of the project area was provided by Carter Associates prior to the survey.

This project was carried out in accordance with the provisions of the National Historic Preservation Act of 1966, the National Environmental Policy Act of 1969, Executive Order 11593 of 1971, and the Archaeological and Historic Preservation Act of 1974. The field work was conducted under BIA Permit No. BIA NAO UA 86 MNA-024-1, issued to the Department of Anthropology, Museum of Northern Arizona. All notes, maps and other materials resulting from this project (MNA Project No. A-86-77) are being curated at the Anthropology Department at MNA.

Notification of impending field work was made by BIA NOI memo dated October 29, 1986. Copies were sent to the Navajo Tribal Archaeologist and to the BIA, both in Window Rock, Arizona.

THE PROJECT

The survey area is located on an unsurveyed portion of Navajo Tribal Trust land approximately 1.5 miles southeast of the community of Kayenta, Arizona. The existing runway is aligned east/west and parallel to U.S. Highway 164 just east of its intersection with State Route 464. The adjoining parcel slated for the proposed airport expansion is located north and east of the existing runway. The location and shape of the 105 hectare (259 acre) survey area is shown in Figure 1.

Masked For Site Protection

Base Map: USGS 7.5 minute series, Kayenta East, Ariz (1968) Quadrangle

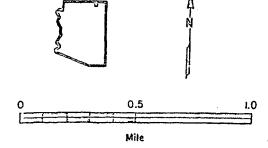


Figure 1. Location of project area showing corners A through F and Isolated Finds 1 through 9.

Specific UTM coordinates (Zone 12) for the five points delimiting the project area (Figure 1) are given in Table 1.

Table 1. UTM Coordinates (Zone 12) for the Project Area Corners (Figure 1).

Point	Northing	Easting
A	40 62 660	5 67 240
. В	40 64 220	5 70 260
C	40 64 060	5 70 340
, D	40 63 360	5 69 020
Ε	40 62 900	5 69 100
F	40 62 520	5 67 280

The existing landing strip consists of a single graded earth runway, approximately 1524 m (5000 ft) long and between 18 m (60 ft) and 27 m (90 ft) wide. Besides the landing strip itself, other areas of the survey parcel have been severely disturbed by recent human activities. Several commercial establishments and at least one private residence exist immediately west of the runway, between it and State Route 464. Lesser impacts to the project area include grazing and, in some areas, extensive vehicular and human traffic. A natural gas pipeline and a power line intersect the northeastern arm of the surveyed parcel. The existing runway is fenced, and a currently occupied horse corral is immediately adjacent to the northwest corner of the runway. No impact to cultural resources appears to have resulted from these disturbances in the area.

Environmental Setting

The project area is at an elevation of from 5710 to 5600 ft, in the Upper Sonoran Life Zone. The alluvial soils that constitute the surface terrain are largely derived from the Navajo and Kayenta Sandstone Formations. The vegetative cover is indicative of an area that has been subjected to overgrazing. Dominated by low scrubbrush, the plant community within the survey area includes russian thistle, greasewood, four-winged saltbush, snakeweed, rabbitbrush, and various grasses.

THE SURVEY

Methods

The project area was intensively surveyed on foot by all three archaeologists walking generally east/west transects spaced 15 m (49.2 ft) apart. This method resulted in 100% visual coverage of the generally level, sparsely vegetated area.

When isolated finds of archaeological materials were encountered their location was plotted on the topographical map, and relevant information concerning each recorded.

Results

During the course of the survey nine isolated occurrences of archaeological materials were located. A description of and UTM coordinates for each are given in Table 2; each is shown by number in Figure 1.

The scant evidence of Kayenta Anasazi utilization, in the form of isolated artifacts and a pot break, probably resulted from prehistoric travel across the area. However, cultural material and subsurface features can be totally buried in this type of alluvial lowland topography, and construction crews should be alerted to the possibility of undetected subsurface cultural deposits.

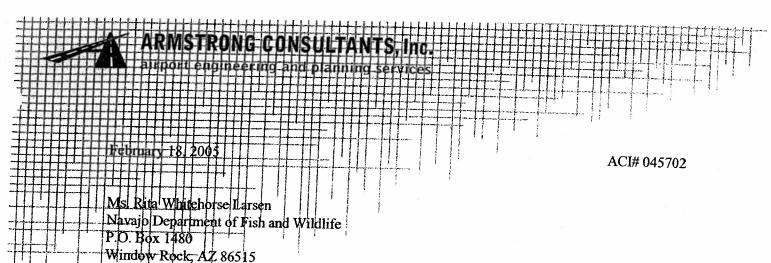
Other cultural material encountered during the survey consisted of recent trash, especially concentrated near the highway and within the area to the west of the present runway.

RECOMMENDATIONS

Because no archaeological sites were encountered during the survey of the project area, and no sites on or nominated to the National or Arizona Register of Historic Places occur within the area, archaeological clearance for the proposed construction activities is recommended.

5

Table 2. Description and Location of Isolated Finds.



MINDOW ROCK, AZ 6031.

RE: Kayenta Airport Master Plan

Dear Ms. Larsen:

Armstrong Consultants has been retained to prepare an Airport Master Plan for the Kayenta Airport in Kayenta, Arizona. To assist us in preparing this Airport Master Plan, and to comply with the requirements of NEPA and the Federal Aviation Administration, we request your comments concerning the possibility of the proposed development actions impacting any area threatened or endangred species.

Enclosed for your reference is a location map, a vicinity map, list of Endangered and Threatened species for Navajo County and a drawing of the proposed improvements to the Kayenta Airport. Please forward any comment at your earliest convenience and please contact me at (970) 242-0101 if you have any questions regarding this project. Thank you for your assistance.

Sincerely,

ARMSTRONG CONSULTANTS, INC.

Justin Pietz

Airport Planner

County Species Lists-Navajo County

Commo Name	n Scientific Name	Status	Description	n County	Elevatio Range	n Habitat	Comments
·1) Lis	sted						
Apacl (Arizona trout) apache		This yellowish or yellow-olive cutthroat-like trout has large dark spots on body. Its dorsal, anal, and caudal fins are edged with white. It has no red lateral band.	Gila Graham Greenlee Navajo	>5000 ft	Presently restricted to colo mountain stream with many low gradient meadow reaches.	ns boulders, rocks, and gravel with some sand or
Bald ea	n gle Haliaeetus leucocephal	dus a h	adults have white head and tail. Height 28-38"; wingspan 166-96". 1-4 If rs dark 19 with varying Flegrees of Fnottled 50 cown	Cochise Coconino Gila Graham La Paz Maricopa Mohave Navajo Pima Pinal Santa Cruz Zavapai			Some birds are nesting residents while a larger number winters along rivers and reservoirs. An estimated 200 to 300 birds winter in Arizona. Once endangered (32 FR 4001, 03-11-1967; 43 FR 6233, 02-14-78) because of reproductive failures from pesticide poisoning and loss of habitat, this species was down listed to threatened on August 11, 1995. Illegal shooting, disturbance, and loss of habitat continues to be a problem. Species has been proposed for delisting (64 FR 36454) but still receives full protection under the ESA.
Black- footed ferre	Mustela t nigripes	co wit fee and ma a b	llow buff Co	oache <1 oconino avajo	g∈ as	rassland plains enerally found in esociation with airie dogs.	Unsurveyed prarie dog towns may be occupied by ferrets or may be appropriate for future reintroduction efforts. The Service developed guidelines for surveying prairie dog towns which are available upon

nose and is 15-18 inches long and tail length is 5-6 inches.

request. No wild populations of this species are currently known to exist in Arizona.

			mones.				
Californi Brown pelican	a Pelecanus occidentalis californicus	S	ered Large dark gray-brow water bird with a pouch underneat long bill ark webbed feet. Adults have a white head and neck, brownish black breast, and silver gray upper parts	rn Cochii Cocor Gila Graha h Green Marico s Mohav Navajo I Pima Pinal Santa Cruz I Yavapa	se nino m lee z pa e	s Coastal land ar islands; species found around many Arizona lakes and rivers	Pacific Coast and is endangered due to pesticides. It is an
California	Gymnogyps californianus	Endangere	vulture (47 in., wingspan to 9 1/2 ft, weight to 22 lbs); adult plumage blackish, immature more brownish; adult wing linings white, immature mottled; head and upper parts of neck bare; yelloworange in adults, grayish in mature.		10	High desert canyonlands and plateaus	Last wild condor reported in Arizona in 1924. Recovery program has reintroduced condors to Northern Arizona, with the first release (6 birds) in December 1996. Release site located at the Vermillion Cliffs (Coconino County), with an experimental/nonessential area designated for most of Northern Arizona and Southern Utah. Experimental/nonessential area in Arizona is within a polygon formed by Hwy 191, Interstate 40, and Hwy 93, and extends north of the Arizona-Utah and Nevada borders.
Chiricahua leopard frog	Rana chiricahuensis	Threatened	colored	Apache Cochiśe Coconino Gila	3300- 8900 ft	Streams, rivers, backwaters, ponds, and stock tanks that are	Require permanent or nearly permanent water sources. Populations north of the Gila River

Graham

dark

mostly free from

north of the Gila River

may be closely-related.

tanks that are

			backgrou on the rea of the thig dorsolater folds that are interrupted and deflected medially, and a call given out of water distinguish this spotted frog from other leopard frogs.	gh, Pima ral Santa Cruz Yavapai d	e	introduced fish, crayfish, and bullfrogs	but distinct, undescribed species. A special rule allows take of frogs due to operation and maintenance of livestock tanks on State and private lands.
Little Colorado spinedace	Lepidomeda vittata	Threatened		Apache I) Coconino Navajo	4000- 8000 ft	Moderate to sma streams in pools and riffles with water flowing ove gravel and silt.	eighteen miles of East Clear Creek, eight miles
Loach minnow	Tiaroga cobitis		Small (<3 inches) slender, elongated fish, olive colored with dirty white spots at the base of the dorsal and caudal fins. Breeding males vivid red on mouth and base of fins.	Apache Graham Greenlee Pinal Navajo	<8000 ft	small to large perennial streams with swift shallow water over cobble and gravel. Recurrent flooding and natural hydrograph important.	Presently found in Aravaipa Creek, Blue River, Campbell Blue Creek, San Francisco River, Dry Blue River, and the mainstem upper Gila River. The New Mexico District Court recently vacated the critical habitat designation for the spikedace and loach minnow. Species also found in Cattron, Grant, and Hidalgo counties in New Mexico.
Mexican spotted owl	Strix occidentalis Iucida		sized with dark eyes dand no ear dufts. Brownish dand heavily Maportted with Mayhite or		000 ft	and dense forests with multi-layered foliage structure.	Generally nests in older forests of mixed conifer or ponderosa pine/gambel oak type, in canyons, and use variety of habitats for foraging. Sites with cool microclimates appear to be of importance or are preferred. Critical habitat was finalized on August

Navajo	Carex	Throatoned	Danson	Pinal Santa Cruz Yavapai			31, 2004 (69 FR 53182). Critical habitat in Arizona occurs in Apache, Cochise, Coconino, Gila, Graham, Greenlee, Maricopa, Navajo, Pima, Pinal, Santa Cruz, and Yavapai counties.
sedge	specuicola	Threatened	forb with triangular stems, elongated rhizomes. Flower: white June and July.	Apache Coconino Navajo	5700- 6000 ft	Silty soils at sha seeps and springs.	ady Designated critical habitat is on the Navajo Nation near Inscription House Ruins. Found at seep springs on vertical cliffs of pink-red Navajo sandstone.
Peebles Navajo cactus	Pediocactus peeblesianus var. peeblesianus	s a c s a F y g	Very small globose 1 inch tall and about 0.75 inch in diameter. The 4 (3-5) radial spines are arranged in a twisted cross and central spines are absent. Ilowers ellow-reen 1 inch iameter oring.	Navajo	5400- 5600 ft	Gravely soils of the shinarump conglomerate of the Chinle Formation.	Extremely limited geographic range. Difficult to grow in cultivation.
Southwestern willow flycatcher	Empidonax traillii extimus	(a ind group an wh thr oliv bre pal yel bel win visi	asserine about 6 ches) ayish- een back d wings, hitish roat, light ve-gray east and le lowish ly, Two cogbars	Apache <8 Cochise Coconino Gila Graham Greenlee A Paz Maricopa Mohave Navajo Pima Pinal Banta Cruz Yavapai Juma	3500 ft	vegetation communities along rivers and streams.	Migratory riparian obligate species that occupies breeding habitat from late April to September. Distribution within its range is restricted to riparian corridors. Difficult to distinguish from other members of the Empidonax complex by sight alone. Training seminar required for those conducting flycatcher surveys. Critical habitat was proposed on October 12, 2004 (50 CFR 60706, October 12. 2004) and

Spikedace Meda fulgida

Threatened Small (<3

inches) slim with silvery sides and "spine" on dorsal fin.

Breeding males brassy golden color.

Graham < 6000 ft Greenlee Gila

Navajo substrates and Pinal moderate to swift Yavapai velocities over sand and gravel substrates.

> and natural hydrograph important.

can be viewed at http://arizonaes.fws.gov. In Arizona there are critical habitat segments proposed in Apache, Cochise, Gila, Graham, Greenlee, La Paz. Maricopa, Mohave, Pima, Pinal, Yavapai, and Yuma counties.

Moderate to large Presently found in perennial streams Aravaipa Creek, Eagle with gravel cobble Creek, Verde River, East-West-Main and Middle Forks of the Gila River in New Mexico, and Gila River from San Pedro River to Ashurst Hayden Recurrent flooding Dam. The New Mexico **District Court recently** vacated the critical habitat designation for the spikedace and loach minnow. Species also found in Catron, Grant, and Hidalgo counties in New Mexico.

3) Candidate

Yellowbilled cuckoo americanus

Coccyzus

Candidate

Medium sized bird with a slender. long-tailed profile, slightly downcurved bill. which is blue-black with yellow on the lower Santa half of the bill. Plumage is grayishbrown above and white below. with rufous

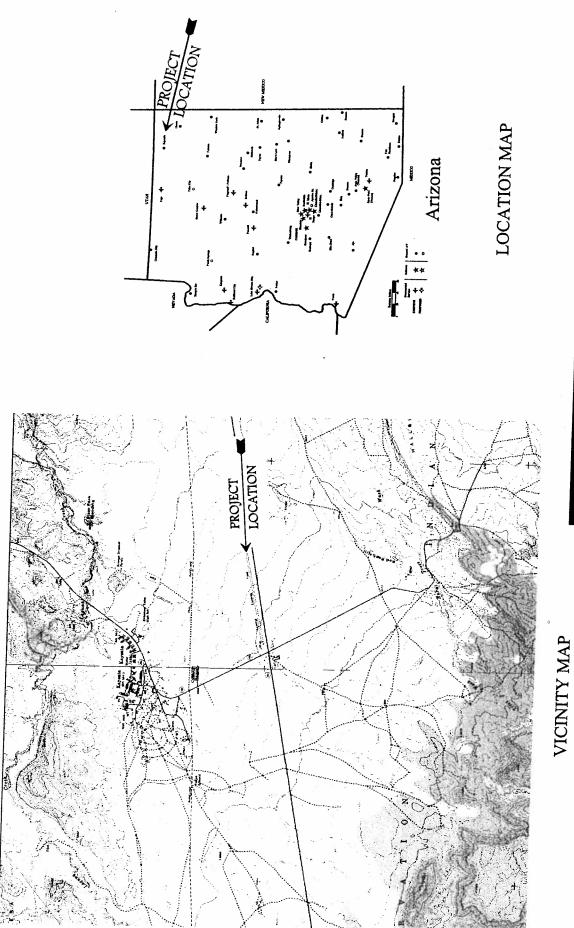
primary flight feathers.

Apache Cochise Coconino Gila Graham Greenlee La Paz Maricopa Mohave Navajo Pima Pinal Cruz Yavapai Yuma

< 6,500 ft Large blocks of riparain woodlands (Cottonwood, galleries).

Species was found warranted, but precluded for listing as a distinct vertebrate population willow, or tamarisk segment in the western U.S. on July 25, 2001. This finding indicates that the Service has sufficient information to list the bird, but other, higher priority listing actions prevent the Service from addressing the listing of the cuckoo at this time.

1



ARMSTRONG CONSULTANTS, Inc.

airport engineering and planning services 1501 Stampode Ave., Suite 3030 Cody, WY 82414 ph: 307.527.4042 fax: 307.527,4043 861 Rood Avenue Grand Junction, CO 81501 pb: 970.242.0101 fax: 970.241.1769 email: aci@am

KAYENTA MUNICIPAL AIRPORT KAYENTA, ARIZONA

	VICINI	VICINITY MAP	•
SCALE: N.T.S.	N.T.S.	DATE	2.18.05
DRAWN: RF	RF	FILE	5702523
CHIK'D:	122	JOB NO.: 045702	045702